



MARKET UPDATE

April 2020

Regional Greenhouse Gas Initiative (RGGI)

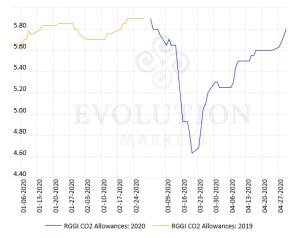
Market Status

RGGI Prices started at \$5.60 in January 2020, and as of the end of April, we are \$0.15 higher with the latest spot price of \$5.75. Prices dropped to a low of \$4.65 in mid-March, as northeast states began shutting down as a result of the COVID-19 Pandemic. However, prices have drifted back once the selling stopped. New Jersey rejoined RGGI, and will begin with an 18

Term	Bid	Offer
Spot	\$5.65	\$5.85
Dec 19 Cleared	\$5.75	\$5.95
Dec 20 Cleared	\$5.95	\$6.15

million ton cap of CO₂ emissions starting in 2020 and declining every year thereafter. The cap is slightly below what compliance entities in New Jersey emitted in 2019.

RGGI 2020 Q1 emissions data was released at the end of April, and as expected, emissions are down 18% compared to 2019 Q1. Emissions levels for the original nine RGGI states for Q1 was 12.3 million tons. If you include New Jersey, total RGGI 2020 Q1 Emissions are 15.7 million tons. Assuming 2020 Q2 Emissions will be also down as states try to recover and slowly re-open, the total RGGI Allowance Bank is estimated to increase to 100 million tons by the end of 2020.

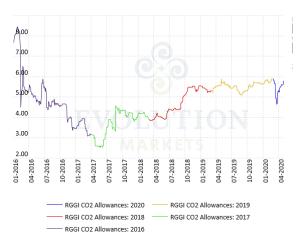


Program Review Summary

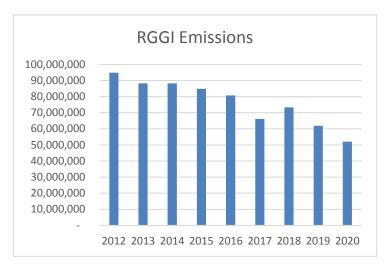
On Dec 19, 2017 RGGI published the results of their Program Review. The Summary is as follows: emissions cap of 75.15 million tons declining by 2.275 million tons per year to 2030. Full 2020 bank adjustment over the five years from 2021 to 2025. A Cost Containment Reserve (CCR) and an Emission Containment Reserve (ECR), the size each being 10% of the regional cap. The ECR Trigger price will be \$6.00 in 2021 and rise 7% per year. The CCR trigger price will be \$13.00 in 2021 and also rise 7% per year.

Fundamentals and Future Outlook

Calendar year RGGI carbon emissions have been falling over time, but the state of the COVID-19 response by the US has accelerated the drop. It is projected that 2020 RGGI carbon emissions will be 15-20% lower than 2019. Since the Supply Side is relatively static and known, the only variable in the fundamentals is annual emissions. Although the 2020 Bank will be adjusted over five years, which in turn reduces the cap over that five year period, current emissions projections see the Bank growing to approximately 100 million tons.



Fundamentals and Future Outlook - Continued



Based on market activity, participants may have assumed the RGGI price would trend toward the ECR trigger price of \$6.00 in late 2020 and then rise by 7% per year, assuming the ECR will act as a soft price floor. However this assumption is based on future emissions being relatively static. Even the best projections cannot predict black swan events, such as the current Pandemic and shutdown of the economy. The current drop in power generation and increase in the 2020 bank of allowances can have unintended consequences as the full 2020 bank gets adjusted over a five year period and reduces the emissions cap. However one wonders as we get back to "normal" what the new "normal" will be and will carbon emissions continue to fall.

Ultimately the price of RGGI will depend on many factors that include actual emissions, which is affected by many variables that include weather, electric demand, and the influx of renewable generation in the region. Other factors will be if new states decide to join RGGI, if new state or regional carbon programs usurp the RGGI Cap, or if RGGI itself decides to review and revise the RGGI cap during the next Program Review.

